

# Infrared Line Tracking Sensor TCRT5000 (3 pins)



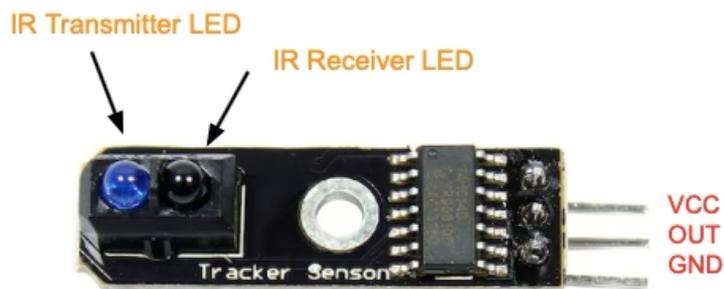
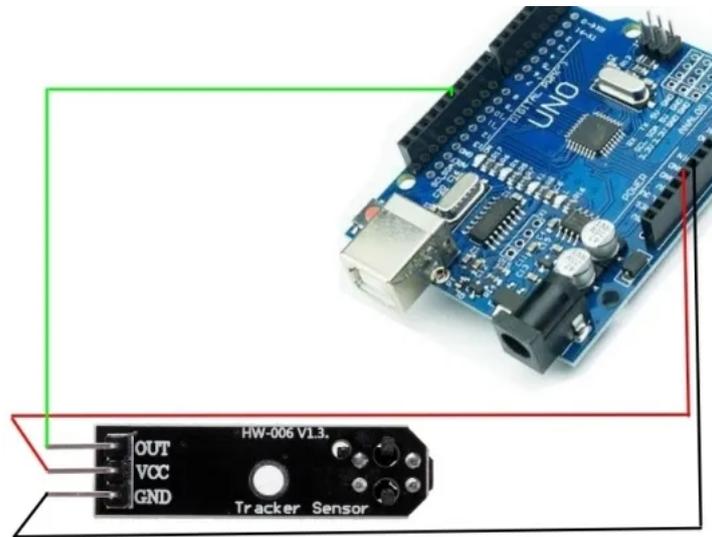
## **Features:**

The TCRT5000 infrared line tracking sensor module detects reflected infrared light to identify lines or nearby obstacles. It integrates an IR LED and phototransistor pair and outputs a digital signal when an object or line reflects the emitted IR beam. Designed for indoor use, it performs best in low-interference environments. This version has fixed sensitivity, making it ideal for line-following robots and simple IR-based detection tasks.

Specifications	
Operating Voltage	3 V to 5 V DC
Operating Current	~20 mA
Detection Range	Up to 15 mm
Output Type	Digital (LOW when line detected, HIGH otherwise)
Viewing Angle	~35°
Sensitivity	Fixed (non-adjustable)
Module Dimensions	40 mm × 10 mm × 7 mm

## **Pinouts:**

Pin Name	Type	Description
VCC	Power Input	Supply voltage input (3V to 5V DC)
GND	Power Ground	Common ground reference
OUT	Digital Output	Outputs LOW when infrared reflection is detected



**Product Pictures:**

